

**Document Type** NA - Canada GHS

**Revision date** 09-Jan-2020

**Version** 1

## 1. Identification

### Product identifier

**Product name** Monarch Proteinase K

### Other means of identification

**Product No** T2001-1

### Recommended use of the chemical and restrictions on use

**Recommended use** This product is for research and development only

**Restrictions on use** No information available

### Details of the supplier of the safety data sheet

#### Supplier Address

New England BioLabs  
240 County Road  
Ipswich, MA 01938  
USA

**Company Phone Number** 978-927-5054, 800-632-5227 (toll free)

**Telefax** 978-921-1350

**E-mail address** info@neb.com

### Emergency telephone number

**24 Hour Emergency Phone Number** 978-380-2125

## 2. Hazard(s) identification

### Classification

|  |             |
|--|-------------|
| Skin corrosion/irritation                        | Category 2  |
| Serious eye damage/eye irritation                | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3  |

**Appearance** Powder

**Physical state** Powder

**Odor** Mild

### Label elements

#### Warning

#### Hazard statements

Causes skin irritation

Causes serious eye irritation



#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection

Use only outdoors or in a well-ventilated area

Wear protective gloves/eye protection/face protection

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

#### Skin

IF ON SKIN: Wash with plenty of water and soap

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing

#### Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

### Other information

### 3. Composition/information on ingredients

#### Substance

| Chemical name | CAS No.    | Weight-% | Hazardous Material Information Review Act registry number (HMIRA registry #) | Date HMIRA filed and date exemption granted (if applicable) |
|---------------|------------|----------|--|---|
| Proteinase K  | 39450-01-6 | 85 - 100 | -  | -   |

### 4. First-aid measures

#### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance.   |
| <b>Inhalation</b>                         | Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.  |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.  |
| <b>Skin contact</b>                       | May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.   |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.   |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section 8 for more information. |

#### Most important symptoms and effects, both acute and delayed

**Symptoms** Coughing and/ or wheezing. Itching. Rashes. Hives. Burning sensation.

#### Indication of any immediate medical attention and special treatment needed

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

### 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>               | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| <b>Unsuitable Extinguishing Media</b>             | CAUTION: Use of water spray when fighting fire may be inefficient.                                      |
| <b>Specific hazards arising from the chemical</b> | No information available.   |
| <b>Explosion data</b>                             |   |
| <b>Sensitivity to mechanical impact</b>           | None.   |

**Sensitivity to static discharge** None.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

## 8. Exposure controls/personal protection

### Control parameters

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear safety glasses with side-shields.

**Hand protection** Wear suitable gloves. Impervious gloves.

|                                       |   |
|---------------------------------------|---|
| <b>Skin and body protection</b>       | Wear suitable protective clothing. Long sleeved clothing.   |
| <b>Respiratory protection</b>         | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.  |
| <b>General hygiene considerations</b> | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. |

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Powder                   |
| <b>Appearance</b>     | Powder                   |
| <b>Odor</b>           | Mild                     |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                               | <u>Values</u>     | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| <b>pH</b>                                     | No data available | None known              |
| <b>Melting point / freezing point</b>         | No data available | None known              |
| <b>Boiling point / boiling range</b>          | No data available | None known              |
| <b>Flash point</b>                            | No data available | None known              |
| <b>Evaporation rate</b>                       | No data available | None known              |
| <b>Flammability (solid, gas)</b>              | No data available | None known              |
| <b>Flammability Limit in Air</b>              |                   | None known              |
| <b>Upper flammability or explosive limits</b> | No data available |                         |
| <b>Lower flammability or explosive limits</b> | No data available |                         |
| <b>Vapor pressure</b>                         | No data available | None known              |
| <b>Vapor density</b>                          | No data available | None known              |
| <b>Relative density</b>                       | No data available | None known              |
| <b>Water solubility</b>                       | No data available | None known              |
| <b>Solubility in other solvents</b>           | No data available | None known              |
| <b>Partition coefficient</b>                  | No data available | None known              |
| <b>Autoignition temperature</b>               | No data available | None known              |
| <b>Hyphen</b>                                 | No data available | None known              |
| <b>Kinematic viscosity</b>                    | No data available | None known              |
| <b>Dynamic viscosity</b>                      | No data available | None known              |

### Other information

|                             |                          |
|-----------------------------|--------------------------|
| <b>Explosive properties</b> | No information available |
| <b>Oxidizing properties</b> | No information available |
| <b>Softening point</b>      | No information available |
| <b>Molecular weight</b>     | No information available |
| <b>VOC Content (%)</b>      | No information available |
| <b>Liquid Density</b>       | No information available |
| <b>Bulk density</b>         | No information available |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | No information available.                 |
| <b>Chemical stability</b>                 | Stable under normal conditions.           |
| <b>Possibility of hazardous reactions</b> | None under normal processing.             |
| <b>Conditions to avoid</b>                | None known based on information supplied. |

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

**Hazardous decomposition products** None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.   |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation.  |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.   |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation". Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Coughing and/ or wheezing. Redness. May cause redness and tearing of the eyes.

### Acute toxicity

#### Numerical measures of toxicity

No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Classification based on data available for ingredients. Irritating to skin.            |
| <b>Serious eye damage/eye irritation</b> | Classification based on data available for ingredients. Causes serious eye irritation. |
| <b>Respiratory or skin sensitization</b> | No information available.  |
| <b>Germ cell mutagenicity</b>            | No information available.  |
| <b>Carcinogenicity</b>                   | No information available.  |
| <b>Reproductive toxicity</b>             | No information available.  |
| <b>STOT - single exposure</b>            | May cause respiratory irritation.  |
| <b>STOT - repeated exposure</b>          | No information available.  |
| <b>Aspiration hazard</b>                 | No information available.  |

## 12. Ecological information

|                                      |   |
|--------------------------------------|---|
| <b>Ecotoxicity</b>                   | The environmental impact of this product has not been fully investigated. |
| <b>Persistence and degradability</b> | No information available.   |
| <b>Bioaccumulation</b>               | No information available.   |
| <b>Other adverse effects</b>         | No information available.   |

### 13. Disposal considerations

#### Waste treatment methods

|  |   |
|--|---|
| <b>Waste from residues/unused products</b> | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| <b>Contaminated packaging</b>              | Do not reuse empty containers.  |

### 14. Transport information

|                          |               |
|--------------------------|---------------|
| <b><u>DOT</u></b>        | Not regulated |
| <b><u>TDG</u></b>        | Not regulated |
| <b><u>MEX</u></b>        | Not regulated |
| <b><u>ICAO (air)</u></b> | Not regulated |
| <b><u>IATA</u></b>       | Not regulated |
| <b><u>IMDG</u></b>       | Not regulated |
| <b><u>RID</u></b>        | Not regulated |
| <b><u>ADR</u></b>        | Not regulated |
| <b><u>ADN</u></b>        | Not regulated |

### 15. Regulatory information

#### Regulatory information

##### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

##### International Inventories

**TSCA** Contact supplier for inventory compliance status.  
**DSL/NDSL** Contact supplier for inventory compliance status.

|                      |   |
|----------------------|---|
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status. |
| <b>ENCS</b>          | Contact supplier for inventory compliance status. |
| <b>IECSC</b>         | Contact supplier for inventory compliance status. |
| <b>KECL</b>          | Contact supplier for inventory compliance status. |
| <b>PICCS</b>         | Contact supplier for inventory compliance status. |
| <b>AICS</b>          | Contact supplier for inventory compliance status. |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

**US State Regulations** This product does not contain any substances regulated by state right-to-know regulations

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**



|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special Hazard -</b>      |
| <b>HMIS</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

**Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

|                      |  |
|----------------------|--|
| <b>Revision date</b> | 09-Jan-2020  |
| <b>Prepared by</b>   | Environmental, Health and Safety<br>978-927-5054                                   |
| <b>Revision note</b> | SDS is valid 3 years from revision date. Contact info@neb.com for latest revision. |

**Disclaimer**

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**End of Safety Data Sheet**